

AMENDMENTS TO THE SPECIFICATION

(1) Please amend page 12, lines 2-4 of the Specification as follows:

Continuous contacting heat exchanger 205 includes heat-releasing chamber 215, heat-absorbing chamber 220, and heat transfer wall 210. Heat-releasing chamber 215 has an inlet and an outlet for a gas that is at least partially saturated with a component absorbable by a desiccant, and an inlet and an outlet for a desiccant. Heat-absorbing 30 chamber 220 has an inlet and an outlet for a gas to be heated, and can further include an inlet and an outlet for a liquid 230 having a component evaporable into the gas. As illustrated in Figure 4, the gas for heat-releasing chamber 215 and heat-absorbing chamber 220 can be the same gas. For example, a slip stream of hot humid air 250 from a Dewvaporation column can be split into gas ~~255~~ 257 for heat-releasing chamber 215 and gas ~~255~~ 257 for heat-absorbing chamber 220.

(2) Please amend page 15, lines 15-16 of the Specification as follows:

The remainder of the Dewvaporation apparatus, e.g., the outer walls 190, 190', 190'', ~~and~~ 192, 192', and 192'', can be made of any gas and liquid impermeable material known in the art. Except for the preference for being water wettable, the materials recited above for use in the heat transfer wall can be used for the remainder of the Dewvaporation apparatus. If low strength materials, such as plastics are used, collapse of either or both chambers of the Dewvaporation apparatus can be a concern. Such a collapse can be prevented by employing any method known in the art, such as placing spacers or fins at various locations throughout the length of the chamber or filling the chamber with a filler. Preferably the filler is made of a high volume gas/air permeable material. A nonlimiting example of a useful gas/air permeable material is T-

15 MR reticulated foam, commercially available from Crest Foam Industries located in Moonachie, New Jersey.

(2) Please amend page 17, lines 22-25 of the Specification as follows:

The embodiment of Figures 8 and 9 can be easily construct from twin wall extrusion plastics, wherein the plastic is extruded to have a cross-section in the shape of a ladder. Useful twin wall extrusion plastics include twin-wall 4mm polypropylene extruded sheets commercially available from Coroplast, Inc. located in Dallas, Texas. Looking at the ladder-like cross-sectional shape, one leg can be used as one side of the heat transfer wall (e.g., 410a₁) that forms one half of one evaporation chamber, and the other long leg can be used as the other side of the heat transfer wall (e.g., 410b₂ ~~310b₂~~) that forms one half of an adjacent evaporation chamber. In this fashion, an array of alternating columns (i.e., an evaporation chamber with a dew-formation chamber wrapped around the evaporation chamber) can be formed. The spaces between the steps of the cross-section ladder, form the dew-formation chambers in the extruded sheet. The helix shape can be obtained by cutting the twin-wall extruded sheets at a desired angle, theta, to the dew-formation chambers formed by the steps of the cross-section ladder. The evaporation chamber is formed by securing two cut sheets with the flat sides (e.g., heat transfer walls 410a₁ and 410b₁ formed by extrusion of the long leg part of the cross-section ladder) facing each other.

Accordingly, the flat sides of each piece on the outer sides of the dew-formation chambers will serve as heat transfer walls 410a₀ and 410b₂, which form half of the adjacent evaporation chambers. The open, angled ends of the dew-formation channels can be connected with tubed end pieces having outside wall 470 and inside wall 475 to connect a front side chamber 420a with a corresponding back side chamber 420b. The tubed end pieces can also be manufactured

in an array by forming an end wall having openings or guiders to communicate the plurality of front side chambers with the plurality of back side chambers.